

Wroble, Julie

From: Wroble, Julie
Sent: Monday, February 29, 2016 4:08 PM
To: 'MACMILLAN Susan'
Subject: RE: Action Levels (3)

206-553-1079

From: MACMILLAN Susan [mailto:MacMillan.Susan@deq.state.or.us]
Sent: Monday, February 29, 2016 3:58 PM
To: armitage.sarah@deq.state.or.us; Wroble, Julie <Wroble.Julie@epa.gov>; McClintock, Katie <McClintock.Katie@epa.gov>
Cc: Narvaez, Madonna <Narvaez.Madonna@epa.gov>
Subject: RE: Action Levels (3)

It appears that all of the cancer-based DEQ Ambient Benchmark Concentrations in the attached table are protective of NC effects as well...with the possible exception of cadmium, by a very tiny margin. But look at my table and see what you think.

From: ARMITAGE Sarah
Sent: Monday, February 29, 2016 3:02 PM
To: 'Wroble, Julie'; McClintock, Katie; MACMILLAN Susan
Cc: Narvaez, Madonna
Subject: RE: Action Levels (3)

Julie,
I am working on a short turn around item related to our metals work so am asking Sue MacMillan to follow up with you and others from EPA.
Thanks for getting back to us, you will hear from Sue.
Sarah

From: Wroble, Julie [mailto:Wroble.Julie@epa.gov]
Sent: Monday, February 29, 2016 2:55 PM
To: McClintock, Katie
Cc: ARMITAGE Sarah; Narvaez, Madonna
Subject: RE: Action Levels (3)

Sarah:
I'm not sure I follow the basis for the action levels you provided. Is there an additional write up somewhere?

I would say that if the metals are carcinogens, you could potentially go as high as 100 times the value for initial screening as that would be equivalent to a 1E-04 cancer risk for chronic exposures. However, many of the metals also have noncancer values and you wouldn't want to exceed an HQ of 1 as that would increase the chance for adverse health effects. Once we get into more careful consideration of the data, we may want to consider the type and severity of adverse health effects.

Cr – 8 (1E-04 cancer risk)
Co – 6.3 (HQ = 1)
Cd – 10 (HQ = 1)
Mn – 52 (HQ = 1)
Ni – 15 (HQ = 1)

PB – ok at 150

This does get pretty tricky pretty quickly.

OAQPS may have a different read. I'm speaking for Region 10 at this point.

Julie

From: McClintock, Katie

Sent: Monday, February 29, 2016 1:00 PM

To: Wroble, Julie <Wroble.Julie@epa.gov>

Subject: FW: Action Levels (3)

Importance: High

From: ARMITAGE Sarah [<mailto:ARMITAGE.Sarah@deg.state.or.us>]

Sent: Monday, February 29, 2016 12:45 PM

To: McClintock, Katie <McClintock.Katie@epa.gov>

Subject: Action Levels (3)

Importance: High

Katie,

Thanks for sharing these with EPA folks for feedback on their level of protectiveness.

Two thoughts I had were comparing to the action levels used in the schools monitoring project (although there may be scientific updates since 2011) and the NATA benchmarks.

Appreciate your ongoing help.

Sarah